

# USDA Tree/Shrub Establishment

## Conservation Practice Job Sheet (612)

### Kentucky

Natural Resources Conservation Service (NRCS)

SEPTEMBER 2003

Participant Name \_\_\_\_\_

**INFORMATION ON THIS JOB SHEET IS CONSIDERED TO BE PART OF THE CONTRACT AND/OR CONSERVATION PLAN.**

#### Definition

Establishing woody plants by planting seedlings or direct seeding or acorns.

#### Purpose

To establish woody plants for forest products, provide wildlife habitat, provide long-term erosion control and improvement of water quality, treat waste, reduce air pollution, sequester carbon, conserve energy, and enhance aesthetics.

#### Conditions Where Practice Applies

On any area where woody plants can be grown.

#### Plant Materials

When possible, plant materials and seed for establishing plant materials should be from within a 150 mile radius of the planting site. If possible, seedlings shall be lifted within one week of planting and shall not be lifted until November 5<sup>th</sup> or until the seedlings have become dormant which ever is later. All seedlings will have a root collar diameter of at least 3/8 inch and roots of at least 5 inches in length.



#### Seedling Care

Seedlings should be protected from sun and wind during shipping and the planting operation. Seedling roots should be kept moist during transportation, storage, and during the planting operation. Seedlings should be planted immediately after delivery. If planting will be delayed for more than 5 days, place them in cold storage at 35 to 45 degrees F. If cold storage is not available, seedlings should be heeled-in. Spread roots against the back of a trench that is slightly deeper than the root system. Cover roots with soil and tamp the soil firmly to eliminate air space.

#### Site Preparation

Site preparation shall be done according to a Kentucky Division of Forestry practice prescription plan.

#### Seedling Planting

- 1) Trees will be planted between November 15<sup>th</sup> and April 15<sup>th</sup> in western Kentucky and between November 15<sup>th</sup> and May 1<sup>st</sup> in eastern Kentucky when the ground is not frozen.

- 2) Planting rates and spacing shall be according to the specific planting purpose in the Tree/Shrub Establishment (612) standard. See Table 1 for specific planting rates and spacing.
- 3) Rows may contain the same species but shall not exceed a maximum of three consecutive rows of the same species. To achieve optimum interspersed, plant at least 2 species per row alternating species within the row.
- 4) Trees shall be planted with conventional planting equipment such as the dibble or planting bar, spade, mattock, shovel, or mechanical tree setter.
- 5) Plants shall be placed in a hole or slit of sufficient depth and width that the root system is fully accommodated in its natural form and position. They shall be set deep enough that the root collar is at or slightly below ground level. Soil shall be packed firmly around the roots.
- 6) Plants will be carried so roots remain moist during planting.

### **Direct Seeding of Acorns**

Acorns may be planted from November through April when the ground is not frozen. To avoid rodent depredation of planted acorns, direct seeding will only be acceptable when the site is 300 feet from existing forestland. One or more of the following seeding methods should be used.

- 1) Broadcast: On a well prepared seedbed, broadcast the seed evenly over the planting area and cover seeds with mineral soil (1/2 to 1 inch).
- 2) Spot: Plant 1 seed per spot, 2 to 3 inches deep. The spots should be 3 to 4 feet in the row to compensate for low germination rates. Cover with mineral soil.
- 3) Machine: Plant seeds 2 to 3 inches deep in mineral soil every 3 to 4 feet in the row to compensate for low germination rates.

### **Operation and Maintenance**

If needed, competing vegetation will be controlled according to Kentucky Division of Forestry recommendations until the woody plants are established.

Replanting failed spots may be required when survival is inadequate according to the Kentucky Division of Forestry.

The trees and shrubs will be inspected periodically and protected from adverse impacts including insects, diseases or competing vegetation, fire and damage from livestock.

See the additional requirements section of this job sheet for program specific requirements or additional technical recommendations.

**If tree and/or shrubs are being established under a program, the participant must follow management requirements as outlined on the conservation plan and program specific Management and Maintenance job sheets that are attached.**

Table 1. Fields that are planned for Tree/Shrub Planting will be established according to the information provided in the table below. If additional room is needed, make copies of this table and attach it to the back of the job sheet.

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Program specific requirements or additional technical recommendations are as follows.

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